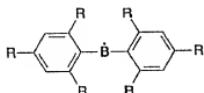


CLAIMS

1. A secondary battery comprising a positive electrode, a negative electrode and an electrolyte therebetween, wherein
5 active material of one of said positive electrode and said negative electrode includes a compound having boron radicals

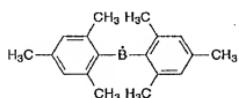
2. The secondary battery as set forth in claim 1, wherein said compound has aromatic and/or alkyl groups combined with boron radicals.

310 3. The secondary battery as set forth in claim 2, wherein said compound is represented by the following structural formula:



where each R represents one of a hydrogen atom, a substituted hydrocarbon group and a non-substituted hydrocarbon group.

420 4. The secondary battery as set forth in claim 2, wherein said compound is represented by the following structural formula:



25 5. The secondary battery as set forth in claim 1, wherein said compound has a spin concentration of higher than 10²¹ spins/g.

30 6. The secondary battery as set forth in claim 1, wherein said compound has spin boron radicals in a starting state.

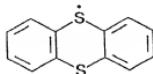
35 7. The secondary battery as set forth in claim 1, wherein said compound has said boron radicals in an electrolytic reduction state.

8. The secondary battery as set forth in claim 1, wherein said compound has said boron radicals in an electrolytic oxidation state.

9. A radical compound type secondary battery
5 comprising a positive electrode, a negative electrode and an electrolyte therebetween, wherein active material of one of said positive electrode and said negative electrode includes a compound having sulfur radicals

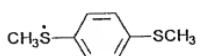
10. The secondary battery as set forth in claim 9,
10 wherein said compound has heterocyclic groups combined
including sulfur radicals.

11. The secondary battery as set forth in claim 10, wherein said compound is represented by the following structural formula:



12. The secondary battery as set forth in claim 9, wherein said compound has aromatic groups combined with sulfur radicals.

13. The secondary battery as set forth in claim 12, wherein said compound is represented by the following structural formula:



14. The secondary battery as set forth in claim 9,
30 wherein said compound has a spin concentration of higher than
 10^{21} spins/g.

15. The secondary battery as set forth in claim 9, wherein said compound has said sulfur radicals in a starting state.

35 16. The secondary battery as set forth in claim 9.

wherein said compound has said sulfur radicals in an electrolytic reduction state.

17. The secondary battery as set forth in claim 9,
wherein said compound has said sulfur radicals in an
5 electrolytic oxidation state.

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